



# GPS GENERATION PARTNERS' EXPANSION ADDS MORE OPTIONS FOR ENVIRONMENTAL RESPONSIBILITY

TVA and participating power companies have announced some exciting news regarding the Green Power Switch (GPS) Generation Partners® (GP) program: GP is expanding to include larger renewable projects and additional eligible renewable resources. Since 2003, only solar and wind resources have been eligible. Now low impact hydropower and biomass are joining the partnership.

The program provides technical support and incentives to homes and businesses that install renewable generation systems. Participants have the satisfaction of contributing to a cleaner environment while lowering their monthly energy bills through the sale of the green power they generate. They also benefit from increased financial incentives to help with installation costs.

"Generation Partners benefits everyone," says Susan Ross, Senior Manager in Customer Resources. "It guarantees the residential, commercial or industrial customer payment for all the power the renewable energy source produces. It's a low-cost way for local power companies to satisfy customers' requests for net metering, and it provides TVA with lower-cost generation for the Green Power Switch program without having to build new plants."

#### Here are some features of the expanded program:

- Eligible renewable resources include solar, wind, low-impact hydropower, and biomass. Biomass includes all solid, liquid, and gaseous forms of these substances: wood waste, agricultural crops and waste, animal and other organic waste, energy crops, landfill gas, and wastewater methane.
- Commercial and industrial power customers of any size can now participate. Previously, only homeowners and small businesses were eligible.

- The maximum system size is now 999 kilowatts, compared with the previous limit of 50. The minimum size remains 500 watts.
- All new participants qualify for an incentive of \$1,000 to help offset start-up costs. That's double the previous amount.
- TVA will purchase all of the green power output. Solar earns a premium of 12 cents per kWh, and other eligible resources receive 3 cents per kilowatt-hour (kWh). These new premiums are paid on top of the retail rate and fuel cost adjustment. Previously, the premium rate for both solar and wind was a flat payment of 15 cents per kWh for residential and 20 cents per kWh for larger customers. Payment for the green power generated is issued to participants in the form of a credit to their monthly power bill.

"We urge those considering installing green power sources to check and see if their power company is a Generation Partners participant," Ross says. "And we encourage those thinking of purchasing renewable energy sources to check out the federal and state tax credits that may be available."

Existing GPS Generation Partners customers who wish to enroll in the new expanded pilot structure may do so until September 30, 2009. Their 10-year contracts will restart from the completion of enrollment. Renewal participants will not be eligible for the \$1,000 installation incentive.

With all the new program features, there's never been a better time to install renewable generation and do your part for a cleaner environment. Go to www.gpsgenpartners.com for more information, or call 1-866-673-4340. For information on tax credits and incentives, go to www.dsireusa.org.

### CALCULATE YOUR HOUSEHOLD'S GREENHOUSE GAS EMISSIONS

An online calculator allows you to figure out your household's greenhouse gas emissions and learn tips to reduce them. It's at www.epa.gov/climatechange/emissions/ind\_calculator.html.

Before you start, gather your most recent electric or gas bills so that you can use real numbers to compute your energy consumption. Since energy bills vary by season, use an average of winter and summer

values if you can. If you buy Green Power Switch® blocks, each 150-kWh block represents about 12 percent of a typical household's monthly use. You can enter your GPS purchase in the calculator and evaluate increasing your purchase to help further offset your emissions.

The site also suggests other ways to reduce your energy use and waste disposal costs.





#### GENERATION UPDATE Sept. 2008 - Feb. 2009



Solar Power 111,371 kWh



Wind Power 28,205,331 kWh



Methane Gas 18,177,751 kWh



**GP Total** 46,494,463 kWh

For a complete listing of solar sites and their daily output, please visit www.greenpowerswitch.com.

#### PARTICIPATION UPDATE As of March 1, 2009

41,803 / Total number of green power blocks subscribed

12,451 / Number of residential customers subscribing

2.0 / Average number of green power blocks per residential customer

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544 / Number of business customers subscribing

Let's welcome Tupelo Water & Light to a growing list of power companies, 112 and counting, that offer Green Power Switch®. Also, thanks to Tupelo Water & Light's inaugural GPS participant and first Green Power Partner, Day-Brite Capri Omega Lighting.

Thank you for purchasing Green Power Switch! As a Green Power Switch participant, you are supporting local power generation from clean, green sources of renewable energy that harness the power of the earth, sun, and wind right here in the Tennessee Valley.

For a list of participating business customers and monthly generation updates, please visit www.greenpowerswitch.com.



#### **GOING GREEN**

IT'S EASY AND IT MAKES FINANCIAL SENSE, SAYS MTEMC MEMBER

What started as a potential financial disaster for Middle Tennessee Electric members James and Lisa Smith is now expected to pay them dividends.

After a water pipe burst in their business space in downtown Franklin's historic district, the Smiths thought their investment was ruined. But several months later, they've turned their misfortune into a potential profit.

"We knew we were going to have to rebuild most of the house as it was totally flooded," James Smith said, "so we saw it as an opportunity to rebuild and adhere to the most energy-efficient standards in the process.

"We decided what we wanted was a zero-carbon-footprint structure, and we chose to go with MTEMC's Energy Star®, Green Power Switch, and Generation Partners programs to help us with the effort." They spent about \$27,000 above what traditional construction costs would have been to install the solar panels and other green elements in the building.

"The real payoff comes on the back end," Smith explains. A financial guru who makes a living crunching numbers, he put his pencil to paper and came up with some very convincing figures. "Our utility bills used to total about \$4,000 a year. However, with all that we've done, we're expecting to spend only about \$1,000 a year, which includes our solar credits on our electric bills — roughly a 75 percent reduction in energy costs."

When he figures the property's appreciation value over a five-year period combined with his projected energy saving costs, Smith expects a 450 percent total return on his investment. "I understand that not everyone can go this far, but I recommend everyone do something to go green," Smith said. "One of the quickest and easiest ways is to purchase blocks of green power."

(Adapted with permission from an article by Todd Palmer of MTEMC.)

#### **DID YOU KNOW?**

In 2008, Green Power Switch participants kept more than 169 million pounds of CO<sub>2</sub> from entering the air, which is the environmental equivalent of taking 14,000 cars off the road!



(Calculated using the EPA Green Power Equivalency calculator at www.epa.gov/greenpower/pubs/calculator.htm)

#### **ENERGY EFFICIENCY TIPS**



- Turn up your cooling system's thermostat to 78°F or even higher if no one is home for several days.
- Tune up your heating-and-cooling system annually to keep it running as efficiently as possible.
- Keep your outside air unit clean and clear of debris and weeds.
- Plant a tree! Shade trees can help keep a home cooler in the summer.

### GROWING GREEN JOBS IN THE TENNESSEE VALLEY

The growth of green, clean energy technology jobs offers a sense of optimism in the current economy, and these jobs are being created right here in the Tennessee Valley.

Two large polycrystalline silicon manufacturers have announced they will build plants in Tennessee. Dow Corning-Hemlock Semiconductor chose a site in Clarksville, and Wacker Chemie AG announced it will locate operations in Charleston, near Cleveland. Polycrystalline silicon is used in the manufacture of solar panels and other energy equipment.

"A growing reliance on sustainable forms of energy is leading to growth rates of 30 to 40 percent annually for the solar industry," said Matt Kisber, Tennessee Economic and Community Development Commissioner. "Tennessee will play a leading role in the growth of solar technology for many years to come."

Dow Corning-Hemlock is making a \$1.2 billion



Officials Announce Dow Corning-Hemlock Semiconductor Site Selection

Pictured from left to right: Clarksville Mayor John E. Piper, Tennessee Governor Phil Bredesen, Dow Corning Corporation President & CEO Dr. Stephanie Burns, Hemlock Semiconductor Group President & CEO Rick Doornbos, Tennessee Commissioner of Economic & Community Development Matt Kisber, and Montgomery County Mayor Carolyn Bowers in December 2008.

initial investment resulting in 500 or more direct jobs. The Wacker operation in Bradley County represents an investment of around \$1 billion and will create 500 jobs during phase I. Both plants will require an additional 1,000 workers during construction.

Other renewable industries that have located in the Tennessee Valley include the first automated wind tower production facility in North America, Aerisyn, in Chattanooga, and a solar panel company, Sharp Manufacturing, in Memphis.

# MEMPHIS LIGHT, GAS AND WATER'S FIRST GENERATION PARTNER HOME

IT'S TOTALLY GREEN

The first Memphis residence joined Generation Partners this past winter, with a 2.1 kW solar panel array. The TERRA house (Technologically and Environmentally Responsive Residential Architecture) was built as a demonstration project by students and faculty from the University of Memphis Center for Sustainable Design. They worked with green building professionals and trades to design and construct the home. which is located in Memphis' Uptown neighborhood, one of the largest green-built communities in the nation.

The 1,800-square-foot home features many green technologies, including insulated concrete forms, recycled materials, and the state's first graywater system (it recycles shower water for use in toilet flushing). Scheduled tours of the home will be conducted throughout the spring. The TERRA construction followed the requirements of MLGW's



EcoBUILD program, the U. S. Green Building Council's LEED rating system, and the American Lung Association's Health House guidelines. Read more about TERRA at http://architecture.memphis.edu.

## HELP REDUCE PAPER WASTE: SIGN UP FOR E-MAIL NOTIFICATION WHEN **GPS NEWSLETTER IS POSTED ONLINE**

In an effort to be more environmentally friendly, the GPS newsletter is available for viewing online for those with Internet access. So far, the online subscription rate is at www.greenpowerswitch.com.

less than 7 percent. Please help us go green by taking a few minutes to provide your e-mail address to us online



# MEMPHIANS CHALLENGED TO EMBRACE SUSTAINABILITY

BRIDGES, a Memphis-based nonprofit that works with youth and adults to combat racism and poverty, has challenged Memphis residents to reduce their greenhouse gas emissions by 10 million pounds by 2010. Through its Ordinary to Extraordinary: Learning and Leading Green (O2E) program, the organization is helping youth and adults become leaders for sustainability.

BRIDGES promotes hands-on learning through museum-like displays at its center, the first commercial green building in the city. It also offers a study program on sustainability for use with schools and community groups. It encourages residents to take simple action steps to save energy, such as: turning off the water while brushing your teeth, planting a tree, recycling, using compact fluorescent lights, buying food locally, changing household air filters regularly, turning off lights when not in use, reducing shower time, and turning down the water-heater temperature. The challenge also encourages support for green power. Buying one block of green power through Green Power Switch can help reduce your greenhouse gas emissions by more than 3,500 pounds annually!

Financial and technical support for the BRIDGES O2E program was provided by TVA.

#### COMMENTS OR SUGGESTIONS

Let us hear from you!

We'd like your suggestions on articles for the newsletter. What would you like to read in future issues? E-mail your comments to **greenpowerswitch@tva.gov**, or write to Green Power Switch, 1101 Market Street, MR 3M, Chattanooga, TN 37402-2881.



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